Observations of the New Star in Orion. By J. E. Gore.

The following are all my observations of this star since January 16, the last observation given in my paper in the *Monthly Notices* for January 1886. The comparison stars are as follows, and their magnitudes were measured for me by Professor Pickering with the meridian photometer at Harvard Observatory:

	Mag.
57 Orionis	5·90
(*b*) = Lalande 11088	6·09
(*c*) = D.M. + 20°, 1156	6·57

Observations of Nova Orionis.

Date of Observation.	Estimated Magnitude.	Notes.
1886, Jan. 23	7·5	Moonlight.
Jan. 29	8·3	More than one magnitude less than (*c*); no moon.
Feb. 3	8·5	Clear moonless sky. *Nova* about equal to a small star nearly due north of it.
Feb. 10	8¾	Small with binocular; moonlight.
Feb. 19	8¾	Faint with binocular; moon rising, 6·55 P.M.
Feb. 22	8·9	Faint with binocular; clear moonless sky.
Mar. 3	9	Faint with binocular; clear moonless sky.
Mar. 6	—	Only seen by glimpses with binocular; clear sky; no moon, 9·25 P.M.
Mar. 25	—	Glimpsed at intervals with binocular; very clear sky; no moon.
April 7	---	Only doubtfully glimpsed with binocular; very clear sky; moon setting.
April 28	—	*Nova* not visible with binocular; very clear sky.

The above observations were made with the binocular with which the star was discovered. From a comparison of the sky with Argelander's magnitudes, I find that the *minimum visible* of this binocular in a clear moonless sky is 8·9 or 9·0 mag. in the scale of the *Durchmusterung*, so that on March 6 the star could not have been much, if anything, brighter than 9·0 mag. My observations, therefore, show a diminution of light from December 13 to March 6 of about 3 magnitudes. Professor Pritchard finds a decrease of only half a magnitude to March 10 (*Monthly Notices*, March, 1886). Mr. Gemmill, on February 24, estimated the star as 9½ magnitude with 3¼-inch refractor (*English Mechanic*, April 16, 1886), and in a letter from a well-known observer in America, dated February 5, 1886, he estimated the *Nova* about 8 magnitude at that date. My observations have also been confirmed by Mr. H. M. Parkhurst, of New York, and by photometric observations at Harvard Observatory.

Ballysodare, Co. Sligo:
May 4, 1886.

Observations of the Companion of Sirius made at the Dearborn Observatory, Chicago, U.S.A. By Prof. G. W. Hough, Director.

(*Communicated by the Secretaries.*)

Date.	P.	S.
1886·066	28°·7	7″·31
·096	29·5	7·25
·099	28·8	7·10
·125	29·1	7·14
·128	28·7	7·21
·145	28·9	7·11
·164	28·8	7·23
·167	28·1	7·20
·170	28·2	7·22
·175	28·3	7·17
·186	29·0	7·25
·203	28·5	7·31
Mean Results 1886·144	28·7	7·21 (12 obs.)

Note on a remarkable Sun-spot. By B. J. Hopkins.

While examining the Sun's surface on April 24 at $20^h\ 55^m$, I had the good fortune to observe the somewhat rare phenomenon of a coloured sun-spot. At the time there were in all five spots on the solar disc, arranged in two groups; the largest spot being the one presenting the abnormal appearance, which in size was equal to all the others put together, and comprised within its single penumbra four distinct umbræ.

Coloured spots have been occasionally seen by different observers, but this spot differed from those hitherto observed, in that it was only two out of its four umbræ which presented an appearance different to what is usually seen. Observed with a three-inch refractor and an Huyghenian eye-piece magnifying fifty diameters, the spot referred to presented the extraordinary spectacle of being of two colours, its two southern umbræ being of the ordinary blackish hue, while the two northern umbræ were of a reddish-brown. So marked, indeed, was the colour, that never having seen such a phenomenon before—though I have observed several scores of spots in the course of the last ten years—I was at first inclined to attribute the unusual appearance to some defect in the instrument, or to some temporary imperfection of my sight. I therefore changed the eye-piece I was using for another negative of double the power, with the result that the only difference observable besides the in-